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SELECTIONS

OF THE

FINANCIAL CO

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No. XLIX.—Rain-fall Duri

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No. 21.

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Selection from the Records of the Financial Commissioner's Office, No. 21.

No. XLIX.—RAIN-FALL DURING 1875.

Memo No. 6065, dated 15th October 1875.

From—C. R. Hawkins Esquire, Officiating Secretary to Financial Commissioner Punjab;
To—The Commissioners and Superintendents, Delhi, Hissar, Jullundur, Amritsar and Lahore Divisions.

As the rain-fall during the year has been in many districts of unprecedented amount, and the subject will require mention in the annual report of the current year, the Financial Commissioner requests that all districts where the rain-fall was unusually heavy a short narrative may be furnished showing the duration and amount of rain-fall and the damage done by it.

No. 67, dated 17th April 1876.

From—Colonel W. G. Davies, Commissioner and Superintendent, Delhi Division,
To—G. W. Rivaz Esquire, Officiating Secretary to Financial Commissioner, Punjab.

Subject.

Rain-fall during the year 1875.

Forwards copy of a revised report by the Deputy Commissioner Dehli on the above subject, and requests that it may be substituted for the copy bearing the same No. and date forwarded under cover of this office No. 53 dated 28th March 1876, which might be destroyed.

No. 385, dated 21st March 1876.

From—T. W. Smyth Esquire, Deputy Commissioner, Delhi,
To—Colonel W. G. Davies, Commissioner and Superintendent, Delhi Division.

Rain-fall.

Referring to docket No. 36 of the 19th instant, calling for a separate report in regard to the duration and amount of rain-fall in this district during the last monsoon, and the damage done by it, as required by Financial Commissioner's memo No. 6065, dated 15th October last, I have the honor to state that up to the week ending 5th September 1875, the total rain-fall of the district was only 17 inches, and fears were entertained that the kharif would have been a failure for want of sufficient rain. On the 8th September, however, there were indications of the rain, which had hitherto held back, coming down plentifully, for on that date there was gauged at the sadr 2·9, Delhi 2·9, Sonepat 4·2, and at Ballabgarh 3·9 inches. There was a cessation towards evening, but about 6 o'clock the rain began to fall in torrents and continued throughout the night and all next day (the 9th) with short intermissions. The quantity measured at 6 o'clock on the evening of the 9th was at sadr 19·5, Delhi 19·5, Sonepat 13·5 and Ballabgarh 11·8 inches, when a break occurred. No more heavy rain fell during the rest of the season.

2. The total rain-fall during the entire month of September was at sadr 29·6, Delhi 27·4, Sonepat 24·5, and Ballabgarh 23·9 inches. The total fall of the entire monsoon of 1875 being—sadr 40·6, Dehli 37·2, Sonepat 33·8, Ballabgarh 31·4, or giving an average for the district of 35·7 inches, while the usual rain-fall is only about 25 inches. In 1873-74 the fall was 42·1 inches, but it was so equally distributed over the entire season that while there were floods all over the country, the

year was not marked with such disastrous results to property and only here and there were crops damaged to any extent.

3. In the statement of weekly rain-fall ending 12th September it was reported that the rain-fall during "this week has been unprecedently heavy, causing "much damage to house property in the city and district, while crops have been "submerged to an extent causing apprehensions for their safety."

4. Immediately after the cessation of the heavy rains the several tahsildars were called upon to furnish as full a report as practicable of the extent of damage sustained within their respective circles. This was a work of time, and the country was too flooded then to admit of their taking any action in the matter.

River Jumna.

5. The rain-fall was so heavy and sudden that the river Jumna rose to an unusual height, especially in the Dehli pergunnah, the Agra canal weir below to some extent obstructing the escape of the water.

Hiranki.
Sindipur.
Ghari Kurri.
Kakwálpur.
Kadipur.
Burpur.
Bijapur.
Alipur.

The river side villages have some of them been quite destroyed, and notably Jhangaula. The flood ran up a nullah a little to the north of the Bowana escape as far as the grand trunk road, which was damaged. The lands of villages marginally noted suffered severely. Barari and the neighbouring villages were deeply flooded. The high state of the Jumna also caused damage indirectly to some distance inland, by heading back the drainage of the country at its natural outfalls.

Western Jumna canal.

6. The Western Jumna canal burst its embankments at Khera-khurd about 10 miles from Dehli, and at Serai Rohilla Khan, near where it crosses the Najafgarh escape channel. From the first breach, the water poured off to the south-west, reaching the Rohtak road which it cut in places, and found its way in some part into the Najafgarh jhíl. No appreciable damage to crops was done by this accident as the water ran off quickly. From the second breach the overflow immediately fell into the escape channel and was carried off safely to the Jumna.

Alumgirpur.
Badli.
Dariapur.
Jhangoli.
Jhotola.
Harioli.

7. All along the canal lands to a considerable extent in places, notably in the villages marginally named, were damaged by the rain-fall water standing too long on them, being checked by the canal embankment. (This evil will be remedied by the construction of new line of the canal, which follows the high ground and does not interrupt the drainage.)

Bowana escape.

The canal escape from Bowana to the Jumna by Alipur did service by carrying, off the excess of rain-fall and overflowed Jumna water from the low grounds on its course. The escape channel from the Mandawri jhíl, about 28 miles up the canal, proved insufficient for its purpose, and the villages of Mandawara and Mandawri have been heavily flooded.

Palam band.

9. The jhíl at Palam burst its band. That at Marauli overflowed, sweeping away large boulders which formed its band across the Jharna. The Rajputana (State) Railway embankments were carried away in many places.

Najafgarh jhil.

10. The Najafgarh jhil rose to 7 feet above its ordinary maximum level, and three feet above the highest level within the last 20 years, and extended to a mile or more in all directions beyond its ordinary limits. The jhil rose to 15 feet at Nanakheree gauge, the highest in 1873

being 10 feet. The water has not yet sunk to its ordinary level. The other smaller jhils in the same track overflowed proportionately, and all the lower lands were converted into swamps, which still have water in them for the most part. A register of gauge readings at the Najafgarh jhil and its escape channel recorded by the Executive Engineer Western Jumna canal during the month of September is annexed.

11. Nearly half the land in the Najafgarh thana was so flooded as to be unavailable for this year's rabi crop. The destruction of kharif crops along the borders of the jhil was of course great. A separate report on the condition of this portion of the district will be submitted with proposals for remission and suspension of land revenue. Communication between the town of Najafgarh and the surrounding country was cut off on all sides for 48 hours, and for nearly a week afterwards it could only be reached by boats.

Destruction of life and property.

12. The destruction of house property and goods and chattels was unprecedented.

Kharif crops.

13. The kharif crops standing on low lands were entirely submerged and destroyed, and those growing on high lands were more or less injured.

Rabi crops.

14. The rabi crops all over the district look thin and poor. Not only was the land generally too wet for the favorable reception of the seed when they were sown, but the late subsidence of the water in the low lands appears to have prevented sufficient preparation of the soil. Much was sown so late that the grain is not yet formed, and if the hot weather should come on with any severity during the next fortnight it will be in danger of being blighted and burnt up before coming to perfection. A less area than usual has been put under rabi crops, and the hopes of the zamindars are especially directed to the coming crop of sugar-cane.

Dehli tahsíl.

15. In the Dehli pargannah it is that most damage has been suffered. The rising of the Jumna, the stoppage of drainage by the Western Jumna Canal, and the flooding of the Najafgarh jhil all operating within this sub-division. The Tahsildar describes the rabi here as an average, but it can hardly be estimated at more than two-thirds of an average except on the canal irrigated lands. In 309 villages in the Dehli tahsil where enquiries had been made, 10,192 houses were reported to have fallen down, 81 head of cattle and 6 human lives were lost. In the remaining villages equal destruction of property had taken place, but the number or extent could not be ascertained as entire villages were swept away.

Ballabgarh and Sonepat tahsils.

15. In Sonepat 6,111 houses were destroyed, and 70 head of cattle and 5 lives were lost. In Ballabgarh 7,621 houses were destrcyed and 70 head of cattle. In the Sonepat khadir the rabi looks, on the whole, well; on the canal lands it is uneven and perhaps below the average.

In Ballabgarh the khadir is very good. The banjar too is good; even on these high and rather sandy soils those parts that escaped with least wet are the best.

City of Dehli.

17. The city of Dehli also suffered severe damage, upwards of 8,000 houses were completely destroyed. Throughout the city temporary sirki huts were provided by the Municipal Committee of Dehli for all whose houses had fallen. Hundreds found shelter in the Jumma Masjid and other large mosques in the city, while many were provided with accommodation in the houses of several native gentlemen. Fourteen lives were lost, and 28 persons were injured more or less from the falling of houses. The extent and value of property destroyed in the city has not been ascertained.

18. Throughout the district, schools, sarais, paráos, bardásht-khanas, cattle-pounds, roads, bridges &c., suffered severely during this flood, and it will require upwards of 12,000 rupees to put them in order.

Damage to public buildings and roads.

19. The Settlement Officer has prepared detailed statements of the entire area submerged and of the crops destroyed. The statements are now being purtalled, and specific application will shortly be made showing the extent of relief sought in consequence of the damage caused by the heavy floods.

Register of gauge readings, Najafgarh jhíl, for September 1875.

Dates.	Belan Bridge.	Jhil Chadai Bridge.	Nanakheri.
1	3·7	1·0	1·0
2	3·7	1·0	1·0
3	3·7	1·0	1·0
4	3·6	1·0	1·0
5	3·6	1·0	1·0
6	3·6	1·0	1·0
7	3·6	1·0	1·0
8	3·6	1·0	5·0
9	25·4	25·3	13·0
10	25·4	25·3	14·0
11	20·8	20·2	15·0
12	18·4	18·2	15·0
13	16·2	16·1	15·0
14	16·2	16·0	15·0
15	13·6	13·5	15·0
16	13·4	13·0	15·0
17	13·0	12·8	15·0
18	12·8	12·6	15·0
19	12·6	12·4	15·0
20	12·4	12·2	15·0
21	12·2	12·0	15·0
22	12·0	11·8	15·0
23	11·8	11·6	15·0
24	11·8	11·6	15·0
25	12·4	12·3	15·0
26	12·4	12·3	15·0
27	12·4	12·3	15·0
28	12·3	12·2	15·0
29	12·3	12·2	15·0
30	12·3	12·2	

No. 53, dated 28th March 1876.

From—Commissioner and Superintendent, Dehli Division,

To—The Officiating Secretary to Financial Commissioner, Punjab.

Referring to his memo No. 6065 dated 15th October 1875, has the honor to forward copies of the reports furnished by the Deputy Commissioners of Dehli Gurgaon and Karnal in connection with the heavy rain-fall of 1875.

The narrative furnished by the Deputy Commissioner of Dehli is specially full and interesting. If required a copy of the letter referred to in para 9 of Deputy Commissioner Gurgaon's report can be furnished. It refers however chiefly to damage done by the rain of the 9th September to public buildings.

No. 298, dated 11th November 1876.

From—Lieutenant Colonel F. J. Millar, Deputy Commissioner, Karnal,
To—Colonel W. G. Davies, Commissioner and Superintendent, Dehli Division.

With reference to circular No. 60, dated 19th October 1875, has the honor to port that in tahsil Panipat there fell 14·9 inches of rain during the following days:—

8th to 12th September	11·1
20th September	0·3
25th and 26th September	3·5

The above rain is reported to have damaged the standing crops to the estimated value of Rs. 6,000, also about 500 kacha and pakka houses have been destroyed in the town of Panipat, and about 2,000 in the several villages of Panipat and about 2000 in the several villages of Panipat tahsil. With regard to Karnal and Kaithal the Tahsildars report that no damage of any consequence has happened.

I altogether doubt the reliability of the report of damages to standing crops; it is of course based upon information given by zamindars.

No. 101, dated 20th March 1876.

From—J. H. Oliver Esquire, C. S. I., Deputy Commissioner, Gurgaon,
To—Colonel W. G. Davies, Commissioner and Superintendent, Dehli Division.

The Tahsildars having furnished reports from their circles, I have the honor to reply to your circular No. 60 dated 19th October last and its enclosures.

2. At first it was understood that the information required was to be furnished with the annual revenue report, hence the delay; but your subsequent reminder removed this impression, and the Tahsildars were called on to supply the information immediately.

3. The Tahsildar Gurgaon writes:—"The inhabitants of this circle lost by inundation and the down-pour of rain which began on the 7th and stopped on the 9th September 1875, to the value of Rs. 2,34,000. The loss was in house property, cattle and grain, and goods of miscellaneous nature. Those that suffered the most were petty shop-keepers, whose shops were of sun-dried bricks, and of mud. The agriculturists' loss was also great in house property and grain. The fall of rain during these three days, *i. e.*, 7th, 8th and 9th, was 21 inches and 1 tenth."

4. The Tahsildar Rewari says that owing to the soil of his circle being sandy the rain did not do much damage to the standing crops. Kacha houses suffered considerably, and some lives were lost in consequence. Loss of property was considerable. The rain fell on 8th and 9th September 1875 without intermission, and measured in the gauge 13 inches.

5. The Tahsildar of Nuh says that the rain began on the 6th September and lasted till the 12th September, and the fall was measured during that time 21 inches. The damage was to the amount of Rs. 24,000 by fall of houses and destruction of grain and other property. That the jhils of Chandani and Kotla overflowing inundated large tracts, destroying standing kharif crops of several villages.

6. The Tahsildar of Palwal writes that the fall of rain during the 6 days, *viz.*, from 7th to 12th September, was 25 inches 1 tenth, which did considerable damage to crops and property, kacha houses suffering the most and consequently their contents. The kharif harvest of 51 villages sustained much loss. In his estimation about one-half of the kharif produce was destroyed by this heavy rain

and inundation caused by it. The total loss was estimated at Rs. 45,200. Three men lost their lives.

7. Tahsildar of Firozpur gives the rain-fall of the 8th and 9th, the two days heavy rain fell, at 9 inches 2 tenths. No lives are said to have been lost, and but small amount of property destroyed, 3,300 rupees.

8. From these summaries it will be seen that the heaviest fall of rain during the season of 1875 occurred on the 8th and 9th September, and the damage done to both movable and immovable property was very great. In addition to this the roads throughout the district were almost destroyed, and more or less injury done to all public buildings.

9. For further particulars I refer you to this office Nos. 348 and 11 of 11th September 1875 and 18th January 1876 respectively.

10. The former of these having been written when the inundation was actually present, conveys a far truer impression than anything I could write at this distance of time.

No. 51, dated 16th March 1876.

From—J. W. Macnabb, Esquire, Commissioner and Superintendent, Hissar Division,
To—G. W. Rivaz, Esquire, Officiating Secretary to Financial Commissioner, Punjab.

* No. 302 dated 20th October 1875, from Deputy Commissioner Hissar.
No. 377, dated 24th November 1875, from Deputy Commissioner Rohtak.
No. 31 dated 14th March 1876, from Deputy Commissioner Sirsa.

In reply to Secretary's Nemo No. 6065, dated 15th October last, transmits, in original, the district reports* on the rain-fall during 1875-76 and the damage done by it. The entire absence of rain during the cold weather has reduced the spring crop to something very ordinary indeed.

No. 302, dated 20th October 1875.

From—Captain C. H. T. Marshall, Officiating Deputy Commissioner of Hissar,
To—Colonel S. F. Graham, Commissioner and Superintendent, Hissar.

Submits remarks anent the recent heavy rain-fall.

In reply to your circular No. 118, of the 19th instant, I beg to submit the following remarks about the recent heavy rain-fall in my district.

The actual amount of rain-fall.

2. The actual amount that fell as detailed below would be thought but little of in most districts. I am told however that there is no one in Hissar who can remember such a rain-fall as we had this autumn. In Hissar tahsil we registered 23 inches, in Hansi 21·9, in Bhiwani 33·2, in Fatehabad 12·0, in Barwala 17·0.

The heaviest down-pour.

3. The heaviest down-pour, and that which did the most damage, took place during the second week of September, and was apparently the tail end of the great storm which did so much mischief in Delhi and Rohtak. As much as 14 inches fell at Bhiwani, but we only had 6 inches at the sadr.

The storm that damaged the city of Hissar.

4. The storm that damaged the city of Hissar itself mostly came up from Bikanir direction on the 20th September, accompanied by a heavy gale; about 15 houses fell in the town (mostly kacha) and portions of the wall gave way.

In Bhiwani and Hansi a good many huts fell.

5. In Bhiwani and Hansi a good many huts fell in, and in the former place the tahsil and police buildings suffered a good deal of injury. Financially speaking there was but little loss to the people, as it does not take the lower classes (whose houses suffered most) long to rebuild their primitive mud huts.

The joy of the people at the copious rain.

6. The joy of the people at seeing this copious rain fall more than repaid them for the little damage that it did. For several years past they have gathered in but scanty harvests, have had no fodder for the cattle, and have been placed in the utmost straits to keep body and soul together.

The aspect of affairs entirely changed.

7. The aspect of affairs is now entirely changed: the country round instead of being one dismal sheet of sand and dust is green as a garden, every inch of available ground is covered with flourishing crops of bajra and jowar, which are growing luxuriantly high. All the rabi land is being ploughed and sown, the rain having been sufficient to ensure even a good spring harvest.

Demand for bullocks.

8. There has been such a demand for bullocks for ploughing, that the villagers could not afford to part with their cattle; and in consequence the fair which takes place this year was poorly attended—there being so few animals in the market.

Autumn and spring harvests anticipated to be plentiful.

9. It is calculated that the yield of this and the spring harvest will be sufficient to last the cultivators for three years, if it is not swallowed up by the usurers.

Fatehabad tahsil was the least favoured.

10. The Fatehabad tahsil was the least favoured, but even there enough fell to gladden the hearts of the zamindars and ensure to them such a full harvest as they had not seen for many a long year.

The late heavy rain has been a perfect God-send for Hissar.

11. Altogether I may say that as far as Hissar is concerned the late heavy rain has been a perfect God-send to the people. They say they never had such prosperous times in their life; so engaged are they with crops and their fields that there has been scarcely any crime in the district for the last month and but few civil suits. The reason of the former is I expect that such a number of men are scattered over the fields night and day, keeping off animals and birds, that it would not be safe for a thief to drive cattle about the country: he would at once be spotted and arrested.

No loss of lives from falling houses.

12. I am happy to be able to say that there has been no loss of life from falling houses.

Amount of damage to Government buildings.

13. The damage to Government buildings may be estimated at Rupees 2,000.

No. 377, dated 24th November 1875.

From—G. Knox, Esquire, Deputy Commissioner, Rohtak,
To—Colonel S. F. Graham, Commissioner and Superintendent, Hissar Division.

I have the honor in reply to your letter No. 118 dated 19th October 1875, and enclosure, to state that the rain commenced in the early morning of the 8th September and continued for three days heavily and incessantly. On the 8th and 9th the rain-fall was 14·4, on the 10th 3·8, on the 11th 7·0.

2. At Rohtak the rain collected in all the low lands to the south and east of the town. Between the kacheri and the town the road was for some time impassable even to a man on horseback.

3. This inundation caused the ruin of the dak bungalow, the house used by the police officer as a residence, and the house occupied by the settlement officer. These are completely ruined.

The tahsil building has suffered and will have to be partly rebuilt. The roofs of the buildings inside the jail were very much injured and are now being thoroughly rebuilt. The roof of the kacheri also sustained injury. This is being repaired by the Department Public Works.

4. In visiting the jail during the inundations I crossed a swift stream of water on the high road in front of the jail; this stream was about 20 feet broad and an average depth of one foot. This emptied itself into all the low lands about the station and outside the town. Similarly a large stream of water came towards the town along the Gohana road.

5. The roads are in many places lower than the surrounding country, and act as an escape channel. They were originally in all probability as high as the land on each side, and may perhaps have been higher, but year by year they get lower and lower, not by being worn away, but by the material being blown away by the prevailing winds, whenever traffic of any sort passes over; the result is that water collects from the surrounding fields on the lowest part which is the road and flows along it.

6. Although the heavy rain injured many a house in village and town, it has helped the agriculturists, as the kharif crop has derived much benefit from it and there is a fair prospect of a good cold weather crop.

7. In some villages however the loss was more serious. Sanghi, a village of 5,117 inhabitants, is in a drainage line, and it was threatened with complete inundation; the villagers did their best to prevent this by putting up bands, this caused an inundation higher up in the villages of Kheri and Chachrana. The disputes between the villagers were incessant for some days as long as the inundation lasted, and might have resulted in a serious riot and bloodshed. The disputes were settled by a partial opening of the bands. The Tahsildar was deputed to the spot with a Deputy Inspector and three or four constables, with instructions to stay there as long as the cause of dispute existed, and to do his best to devise a remedy and prevent a disturbance. I think however the subject of the drainage question should be taken up, and the line opened out to prevent a future dispute, and that a subordinate of the canal department should be deputed to carry out a line of levels and report on the feasibility of clearing the drainage line.

8. The villages of Lardakpur, Gangarwah, Lukhsur, Kharipur, Chalka, have also suffered severely from the inundation. A separate report has been furnished on this subject in my letter No. 308, dated 10th November 1875. In some if not of all of these villages there will probably be a necessity for remission of revenue for one or two crops.

No. 31, dated 14th March 1876.

From—G. E. Wakefield Esquire, Deputy Commissioner, Sirsa,
To—J. W. Macnabb Esquire, Commissioner and Superintendent, Hissar Division.

His circular No. 118 of 19th October last and Financial Commissoner's No. 6065, dated 13th idem.

Reports on the above subject as follows.

The average rain-fall during the year under report has been 25 inches, the annual average for the past 17 years having been 13 inches, so that the rain-fall this year was nearly double the past 17 years average. In 1862, however, there was an average rain-fall in the district of 22 inches.

2. The details according to tahsils are as follows, and they are noted to bring out that the Fazilka pargannah has not had such rain for 17 years, while in Sirsa and Dabwali tahsils there was a heavier rain-fall in 1862 than now. The details are:—

Tahsils.	Average for 17 years.	Rain-fall in 1875-76.	Rain-fall in 1862.
Sirsa	14 inches	20 inches	22 inches
Fazilka	11 "	28 "	17 "
Dabwali	13 "	17 "	26 "
Average ...	13 "	22 "	22 "

The rain fell mostly in August and September, and although late for the autumn crop yet sufficient for both the autumn and spring crops.

No. 722, dated 31st March 1876.

From—A. Brandreth Esquire, Commissioner and Superintendent, Jullundur Division,
To—G. W. Rivaz Esquire, Secretary to Financial Commissioner, Punjab.

Deputy Commissioner Jullundur's No. 85 of 2nd March 1876.
Do. Hoshiarpur's No. 155, dated 28th idem.
Do. Kangra's 539 of 12th November 1875.

With reference to his memo 6065 dated 15th October last has the honor to submit reports as per margin of the Deputy Commissioner of this division in regard to the rain-fall in their districts during 1875.

No. 85, dated 2nd March 1876.

From—Major C. Beadon, Officiating Deputy Commissioner of Jullundur,
To—Arthur Brandreth Esquire, Commissioner and Superintendent, Jullundur Division.

I have the honor to comply with your No. 8/101 of the 13th January by submitting the following reports upon the rain-fall of 1875, and the damage done by it.

2. The total fall up to 30th September in each tahsil was as follows :—

	Inches.
Jullundur	52·2
Phillour	31·5
Nawashahr	43·2
Nakodar	45·7

3. The heaviest averages were attained in the four weeks noted below :—

	Inches Tenths.
Week ending 8th August	$21·5 \div 4 = 5·3\frac{3}{4}$
Week ending 15th August	$33·4 \div 4 = 8·3\frac{1}{2}$
Week ending 12th September	$52·8 \div 4 = 13·2$
Week ending 26th September	$26·0 \div 4 = 6·5$

4. Much damage was done to crops in the Jullundur tahsil especially, as well as in the neighbourhood of the Beyn in that of Nakodar, by the repeated floods of the year.

5. In some cases in Jullundur, in some of the irrigated lands near the railway and near Nahul on the Kapurthulla road, the water did not dry up till the opportunity for sowing the rabi had passed away. In other cases, as at Dhogri, the best lands are the sailaba lands, and these have necessarily suffered heavily. Near Jullundur, on the other side of the railway especially, many wells were injured by the first flood, and further damaged by the second and third, so that the necessary repairs were heavy.

6. The Tahsildars of Jullundur and Nakodar, under orders of Mr. Barkley, inspected and reported cases in which the kharif revenue could not be taken in full without hardship. Mr. Moore, who officiated as Deputy Commissioner during December and January, made a tour in the Jullundur tahsil himself, and has left on record his decision upon each case reported by the Tahsildar. I have gone over the Nakodar tahsil reports and seen much of the country. Though much hardship must have occurred, and the Tahsildar has recommended suspension of demand in 23 cases, yet I only saw fit in 2 cases to support the Tahsildar's recommendation.

7. The zamindars themselves are clamorous for remission, but this seemed altogether inexpedient.

8. I look upon suspension as bad in practice, for it only puts off hardship, hence my reason for rejecting so many of the Nakodar Tahsildar's proposals. I have gone over some of Mr. Moore's work and am of opinion that he has been too tender-hearted, but I do not feel myself competent to alter it unless specially authorized. I observe also, in some instances, that Mr. Moore has sanctioned suspension of entire autumn demand from a village where only a portion of the area has been destroyed. This is surely wrong?

9. In Nawashahr and Phillour and the higher parts of Nakodar everything was well until the last storm, which seriously damaged crops, especially cotton and chari. Relief however did not appear requisite, since the injury was caused by wind and not by floods.

10. The following shows the area of cultivation destroyed, and the recommendation that has been made for remission or suspension of Government demand, details of which will form the subject of a separate report.

		Acres.	R.	P.
Jullundur.—Crops destroyed	...	2,489	1	10
Recommended remission	...	Rs. 930	0	0
Do. suspension ...	...	„ 4,097	8	0
		A.	R.	P.
Nakodar.—Area destroyed	...	236	2	5
Recommended suspension	...	Rs. 208	12	2

11. The rain fell most incessantly during the weeks ending 12th and 26th September. The damage on these occasions to house property in Jullundur from the rain and wind, and from the floods which the former caused in the country round about Alawalpur, was enormous.

No. 155, dated 28th March 1876.

From—*W. Coldstream, Esquire, Officiating Deputy Commissioner, Hoshiarpur,*
To—*A. Brandreth, Esquire, Commissioner and Superintendent, Jullundur Division.*

In accordance with the direction of the Financial Commissioner communicated in your circular No. 169—2262, of 19th October 1875, I have the honor to submit two tabular statements showing—

(1) the duration and amount of the excessive rains of last season; and

(2) an estimate of the damage done by it in the various parganahs of the district.

2. As regards the duration and amount of rain-fall, statement I shows that the rain-fall throughout the district was 48 per cent in excess of the average for the previous 4 years; and excluding Garhshankar tahsil, where the fall was highest, the excess was as much as 57 per cent over the average of these years. In September most rain fell, but it continued over into the month of October, during which more than one inch fell on an average throughout the district.

Buildings	1,37,000
Crops	1,30,000
Grain in pits	1,06,000
Trees	25,529
Fodder	8,000
Cattle	20,000
Total Rs.	4,26,529

3. The statement showing the estimated damages resulting from the rain and floods gives it under the heads and shews the estimated loss in rupees as per margin. The total result of Rs. 4,26,529 worth of property lost must be under the mark, for as the statement will shew, an estimate of the damage in money has not in some cases been made. The whole amount must not however be looked upon as *extraordinary* damage. Each rainy season of course a number of buildings fall, a certain amount of grain in pits is destroyed and of cattle die. But making allowance for *ordinary* loss, there is no doubt that the injury done by the rains of 1875 was of the most serious nature and of formidable extent.

4. The tahsil of Dasuah suffered most, a great proportion of its low-lying area being subject to the action of the floods of the Bias river. The river is said to have come down last year in 19 different floods. Crops of Indian corn was twice and thrice sown and washed away. Mot, urd and rice were also seriously damaged, and the out-turn of the kharif crop in Dasuah tahsil was very small. Crops of indian corn and other grains, not including rice, were entirely destroyed on an area of 11,629 acres, bearing a Government demand of Rs. 11,155.*

5. The loss of trees to the value of Rs. 25,000 represents the value of trees blown down in the hurricane of September 1875. Their value is not properly speaking *lost*, as the trees are sold and their value realized, but as the hurricane occurred at the rainy season and did great damage, I have included the figures in this statement. The amount of Rs. 20,000 shewn as the value of trees blown down in

* *Note.*—I lately visited this part of the district (the "bet" tract of the Bias). The people have been considerably distressed. A very large number of cattle have died in consequence apparently of excessive drought and bad feeding. Complaints of the utter destruction of the joar and mot crop were universal; they have been put to trouble and expense in repairing their dilapidated houses; the present (rabi) harvest is not very good, having in many places been sown in land still saturated with moisture; and the villages are many of them hopelessly indebted. I made enquiries in many villages and found that many of them are said to owe to their sahukárs as much as 10 years jama. Some villages are over-populated, and the holdings are too small to provide food for the owners. In Gandwal the people are said to have raised money for payment of the Government demand by betrothing their children. When I inspected the tract most of the winter revenue instalment had been paid up, and it has all been recovered since. But the people cannot bear much more: and another bad harvest would be a very serious matter. There was a scarcity of food among the poorer agriculturists although the rabi was on the ground.

Hoshiarpur parganah includes the trees of zamindars as well as those belonging to Government. The total of Rs. 25,529 for the district must be much under the mark, as the Tahsildars of Dasuah and Unah have not made an estimate under this head.

No. 1.

Statement of rain-fall required by Secretary to Financial Commissioner's Memo No. 6065, dated 15th October 1875 in the district of Hoshiarpur.

Name of Tahsil.	Period and quantity of rain.					Total amount of rain.	Average of rain during the years 1871 to 1874.	Remarks by Deputy Commissioner.
	June 1875.	July 1875.	August 1875.	September 1875.	October 1875.			
Hoshiarpur	2·8	8·7	13·2	14·8	1·0	40·5	28·2	In 1872 the fall was 35·7
Dasuah	2·8	14·6	17·8	19·2	0·7	55·1	28·4	In 1874 the fall was 35·2
Garhshankar	1·1	8·0	12·5	10·8	2·0	34·4	28·4	In 1872 the fall was 47·7
Unah	1·1	7·9	15·3	15·6	1·9	41·8	30·6	In 1872 the fall was 35·6

No. 2.

Statement showing the damages caused by incessant rains to buildings, crops, grain pits, trees, fodder and cattle in the Hoshiarpur district during the year 1875-76.

1	2	3		4		5		6		7		8		9
No.	Name of Tahsil.	*Buildings.*		*Crops.*		*Grain pits or Khatas.*		*Trees.*		*Fodder.*		*Cattle.*		Remarks.
		Estimated No. of houses damaged.	Estimated value caused by the damage.	Estimated area under cultivation affected from heavy rains and floods.	Estimated value caused by the damage.	Estimated quantity of grain damaged.	Estimated value caused by the damage.	Estimated number of trees fallen down.	Estimated value caused by the damage.	Estimated quantity of fodder damaged.	Estimated value caused by the damage.	No. of cattle died.	Estimated price of the cattle died.	
		No.	Rs.	Acres.	Rs.	Mds.	Rs.	No.	Rs.	Mds.	Rs.	No.	Rs.	
1	Hoshiarpur ...	2,000	25,000	...	...	3,000	5,000	2,000	20,000	Tahsildár adverts to the injury to fodder, but does not estimate its value.		...	...	
2	Dasuah ...	20,194	1,10,000	11,629	1,25,000	2,00,000	1,00,000	...	...	...	8,000	2,000	20,000	One village (Kalla) was entirely swept away.
3	Unah ...	...	2,000	...	5,000	2,000	1,000	...	...	...	...	...	...	
4	Garhshankar,	10,400	...	Tahsildár says that the crops of 58 villages were damaged.		...	...	16,700	5,529	...	...	...	...	The amount of Rupees 5,529 was realized by auction for the fallen trees in tahsil Garhshankar.
	Total ...	32,594	1,37,000	11,629	1,30,000	2,05,000	1,06,000	18,700	25,529	...	8,000	2,000	20,000	

No. 539, dated 12th November 1875.

From—Alex. Anderson Esquire, Deputy Commissioner, Kangra,
To—Lieutenant Colonel W. G. Davies, Commissioner and Superintendent, Jullundur Division.

In reply to his No. 169, dated 16th ultimo, has the honor to report that the rain-fall statements of this district show, that the fall this year up to date has been rather under the average, except in Palampur. During July, August and September however, the fall was very heavy, and has nearly brought the total fall up to the annual average. The fall in the early months of the year was very light. The excessive fall of rain from July to September has not caused any serious damage to the crops.

No. 81—850, dated 8th May 1876.

From—Colonel Ralph Young, R. E., Commissioner and Superintendent, Lahore Division,
To—G. W. Rivaz, Esquire, Officiating Secretary to Financial Commissioner, Punjab.

No. 172, dated 27th April 1876, from Deputy Commissioner, Lahore.
No. 368, dated 17th December 1875, from Deputy Commissioner, Ferozepore.
No. 114, dated 25th March 1876, from Deputy Commissioner, Gujranwala, and enclosures.

Has the honor to forward, in original, the reports noted in the margin, called for in his memo No. 6,065, dated 15th October last, regarding the rain-fall during the year 1875.

No. 172, dated 27th April 1876.

From—Captain R. P. Nisbet, Deputy Commissioner, Lahore,
To—Colonel R. Young, R. E., Commissioner and Superintendent, Lahore Division.

I have the honor to furnish the following narrative of the heavy rain-fall that occurred in the Lahore district in August and September of last year, called for at once in your circular No. 41—753, dated 22nd instant.

2. It is stated on credible authority that the Lahore district was never visited with such a rain-fall as occurred last year for above thirty years past. The average annual fall shown in the report of the revised settlement for this district is from 15 to 20 inches in the northern portions of the district, and 12 inches in the south-west, which would give an average of about 16 for the whole, whereas the rain-fall in August and September within only 12 days was a little over 28 inches, and the total fall during the season was not only very excessive, but most unequally distributed.

3. The damage to dwelling houses and to cultivation was very considerable, but with regard to the latter the loss was only temporary as the lands were re-sown, and except in alluvial tracts there has been little or no loss of revenue.

4. The following table shows duration and amount of the heaviest rain, and reported damage done by it.

Name of Tahsil.	Quantity of Rain-fall.			Area flooded by rain.	Assessment of the flooded lands.	Number of houses destroyed completely or in part.	Number of villages which sustained a serious loss.	Remarks.
	Average for past 5 years.	During the year under report.	During August and September.					
				Acres	Rs.			
Lahore ...	19·0	32·0	24·2 as per detail ... August 7th 0·7 8th 1·6 9th 2·5 10th 6·2 12th 3·0 16th 0·5 September 10th 1·7 11th 0·1 21st 0·6 23rd 2·1 25th 3·3 26th 1·9	5,828	6,263	6,500	57. Of this Talwara, Chak Rampura, Muhammad Buti, and Bhaini Par were almost entirely inundated.	Approximately 50 lives were lost from falling houses, &c.
Chunian ...	15·5	31·5	26·7 as per detail ... August 8th 2·5 9th 6·6 10th 9·4 September 7th 0·5 20th 0·3 21st 1·0 25th 1·9 27th 2·5 29th 2·0	8,702	4,689	4,230	8. Of this Kot Pindi Das and Kilan suffered serious loss.	3 men were drowned.

Name of Tahsil.	Quantity of Rain-fall. Average for past 5 years.	During the year under report.	During August and September.	Area flooded by rain.	Assessment of the flooded lands.	Number of houses destroyed completely or in part.	Number of villages which sustained a serious loss.	Remarks.
Kasur ...	15·4	45·1	40·4 as per detail ... August 8th 2·1 9th 5·1 10th 24·0 12th 1·1 September 10th 1·0 11th 0·3 25th 4·7 26th 1·4 27th 0·7	207	64	2,209	5. Sabbrai, Basba, Kirtowal, Kasur Khas and Hariki.	13 lives lost, 10 from falling houses and 3 drowned.
Sharakpur...	14·2	26·2	20·9 as per detail ... August 8th 1·4 9th 4·2 10th 4·2 11th 2·6 12th 2·4 September 10th 1·1 11th 0·3 21st 1·0 25th 3·7	5,708	7,722	3,224	5. Narowal, Mahi, Mari, Smailpur and Thallah Mohari.	No loss of human life, but 94 cattle were lost in ilaqa of Kot Pindi Das and Killa Sattar Shah.
Total ...	64·1	134·8	112·2	20,445	18,738	16,163	75	66 lives lost.
Average for the District,	16·0	33·7	28·0					

5. It will be observed that out of 1,75,227 houses, shewn in the census report of 1868, 16,163 or about 10 per cent were ruined either completely or partially.

6. The rain-fall is more than double the average of the last five years, or again that shown in the revised settlement report.

Rain-fall at Kasur.

7. The rain fell heaviest at Kasur, where on the 10th August 24 inches or 2 feet were measured in one day. This would appear almost beyond belief, if the fall separately measured at Raiwind and Changamanga on the same day was not also given at 17 inches. The effects of this flood to the town and neighbourhood of Kasur itself was must disastrous, where alone the damage was estimated at a lakh of rupees, about 2,017 pakka buildings were destroyed.

8. The Rohi nallah to the east of the town received such an accession of water from the north, either on the Amritsar or Gurdaspur side, that it assumed proportions hitherto quite unknown, and this usually insignificant stream became a turbulent torrent from half to three quarters of a mile in width, sweeping trees, houses, the grand trunk road, which was breached over half a mile in width, before it.

9. From the 10th to 20th August, and again from the 26th September to 1st October 1875, all communication between the town and the tahsil was kept up only by boats; the velocity of the water in the Rohi was so great that neither men or animals could stem it; hundreds of old graves in the neighbourhood of Kasur were washed away. The dry bed of this nallah presents an appearance as if left by a large river, and except that such a flood as described had never happened before, and it is probable with never recur, it would be necessary to take some measures by the construction of a band or otherwise for the protection of the town of Kasur.

10. The kharif crops, such as jowar, makai and pulses, sown in manjha lands in the month of July, were almost entirely destroyed by the enormous fall of rain on the 10th August 1875, which for many days was followed by an easterly wind (purwa) said to bring blight (tela), which attacked the fields that had escaped injury from rain.

11. Lands newly brought under cultivation in the Kasur sub-division derived immense benefit from the heavy rain, and the kharif crops sown after the 10th of August even in what was considered poor lands were very superior both in Kasur and Lahore.

12. The damage to crops in all alluvial tracts was considerable, and according to produce rates is estimated at rupees 60,400. Fodder for cattle also in the same situations was scarce.

Tahsil Sharakpur.

13. In tahsil Sharakpur the Deg nallah had not been so full for many years and over-flowed considerably, causing much temporary loss where crops had been sown. The abundance of grass in *bár* tracts in this tahsil was most grateful to graziers.

Tahsil Chunian.

14. In tahsil Chunian there was no particular damage done by heavy rain; on the contrary it was of incalculable benefit in the south-east corner of the district, and afforded baraui cultivation and an abundance of grass. The subsidence of the water in river villages was rather unusually deferred as the flood was higher than in ordinary years, but the villagers were only eager to return and take up their lands, and the rather extensive ruin to their houses was speedily remedied.

15. In tahsil Lahore the principal damage done was to house property in the city itself. Any one acquainted with the character of half the houses in the narrow steets and lanes will easily understand the situation consequent on 48 hours continuous rain, with wind blowing on houses 3 and 4 stories high, built one on the other regardless of the strength of foundations or the most ordinary rules of house building; again, houses falling into the roadway choked the drains, and though gangs of men were kept constantly at work clearing them yet before they could remove the *debris* of one house the accumulation of water had sapped the foundation of another, which only fell to continue the evil the workmen were toiling to overcome. Again, there is a large area of the city so low that its drainage cannot run away into the main sewer, which is at a higher level, and here whole streets of houses were deserted by the inhabitants, who when the flood of waters 3 and 4 feet deep had subsided by absorption only returned to find their houses desolated. Certainly the dwellings here are mostly kacha and of no great value, still the distress for the time being was keenly felt. Arrangements were promptly organized to shelter the houseless poor in sarais, dharmsalas, masjids, or the houses of their more wealthy neighbours. The hujras of the Jumma masjid afforded shelter to a large number of people. Nawab Nawazish Ali Khan, Mian Muhammad Sultan and Lalla Bhagwan Das took in large bodies of people, and their generous conduct contrasted most favorably with one or two rich men who missed this opportunity of assisting their poorer and less fortunate neighbours.

Tahsil Lahore.

16. The traffic on all roads leading from Lahore was for several days much interrupted. The sea of waters which the Ravi presented extending almost from the walls of the fort to Shahdera, was a sight few of the citizens had ever seen, and the oldest inhabitant had to recast memories of the time of Maharaja Sher Singh. The bridge of boats over the Ravi had for some time to be replaced by a ferry, which was promptly organized.

17. Several villages on the river sustained severe and permanent losses, homesteads were entirely obliterated in the rolling flood, cattle before they could be driven off were overtaken and drowned, and on the subsidence of waters their carcasses had to be buried by special gangs of workmen employed for the purpose; large quantities of dead cattle were found lying to the north of the State Railway line and grand trunk road, which acting as a bund prevented their being carried further.

18. Several of the bunds erected for the protection of the Ravi bridge works of the Northern State Railway burst and occasioned a disastrous flood in villages which would ordinarily have escaped. Those that suffered most are Mahmud Buti Bhagwanpura and Killa Khizana.

19. It is deserving of notice that the effect of the heavy rain on many wells in tahsil Kasur, where the water was previously quite brackish, was to sweeten and improve them; these wells silted up with the flood water, and now they have been cleaned out and restored the water is excellent; whether it will remain so has yet to be shewn.

Wells.

20. In tahsil Sharakpur the effect of the wells being filled with flood and dry water has been that when cleared out after subsidence the water appears to have risen permanently 4 or 5 feet above the former level. I say, appears, because I have no doubt many will consider as I do that the rise in the level of the water is partly temporary and partly the result of cleaning the well out.

21. The health of the people was generally good throughout the district. In the city of Lahore sporadic cases of cholera which had occurred off and on for some time disappeared rapidly. There was a good deal of fever here and in other large places, but generally there was much less fever than might have been expected after such rain, which also

Health.

had a very beneficial effect on cattle disease, which in the previous months had been rather prevalent.

Alluvion and diluvion.

22. The losses by diluvion have been rather considerable this year, as must be expected, and are as follows :—

Diluvion	... ...	Rs. 9,734
Alluvion	... ...	„ 1,766
Net decrease	...	„ 8,028

Remission and suspension of the Government revenue.

23. In consequence of the heavy rains during the year the following remissions and suspensions had to be applied for. A great number of applications have had to be enquired into, but the very moderate result will I trust be deemed satisfactory.

Remissions.

1.	Mahmud Buti	... ...	Rs. 160
2.	Killa Khizana	... ...	„ 9
3.	Bhagwanpura	... ...	„ 12
	Total	...	„ 181

Suspensions.

1.	Mahmud Buti	... ...	Rs. 509
2.	Chak Rampura	... ...	„ 25
3.	Bhaim Par...	... ...	„ 115
4.	Talwara ...	... ...	„ 123
	Total	...	„ 772

General result.

24. Though at the time of a heavy flood like this, the prospect looks gloomy and the temporary distress is undoubtedly great, yet the patience of the people and the encouragement and sympathy for them of the district officers, and the prompt organization of measures of temporary relief with a not too credulous belief in the alleged or seeming ruin of individuals, results in an astonishingly early recovery from misfortune, and as far as the agricultural community are concerned the ultimate benefit to them of a more than copious rainy season is with trifling exception far greater than the temporary loss they sustain, and in the abundant harvest now under sickle they are able to forget the discomfort and some injury they suffered to obtain it.

No. 114, dated 25th April 1876.

From—Major F. D. Harington, Deputy Commissioner of Gujranwala,
To—Colonel R. Young, R. E., *Commissioner and Superintendent, Lahore Division.*

In submitting the report called for in Financial Commissioner's No. 6065, dated 15th October 1875, received with your circular No. 162-2346 of 23rd idem, I have the honor to submit a statement marked *A.* which will shew the rain-fall on each date of July and August 1875.

2. The total fall registered at the kutcherry and each tahsil during these months are however given below, and for comparison also that for July and August 1874.

Month.		Kacheri.	Tahsil Gujranwala.	Tahsil Wazirabad.	Tahsil Hafizabad.
July 1875	...	21·2	18·3	9·3	8·1
" 1874	...	4·3	4·1	2·9	4·3
August 1875	...	15·2	14·5	14·0	11·5
" 1874	...	4·3	3·3	2·9	2·6

At Gujranwala the heaviest falls were on 15th, 16th and 31st July, and 9th and 10th August 1875.

At Wazirabad July ditto ditto on 16th and 30th July and on 9th and 10th August.

At Hafizabad July ditto ditto on 13th and 30th July and on 9th, 10th and 11th August, or on or about the same dates throughout the district.

3. On the 16th July there was so much water in the gap above Rai Mul Singh's garden that the train in the morning from Wazirabad under great difficulties reached the Gujranwala station, and that from Lahore which used to pass 2 hours later had to stop at Gujranwala and the line was not re-opened until the 18th to Wazirabad.

4. In August 1875, the railway line was so much damaged and under water from Muridki to Shadera on 10th that the railway was entirely stopped from this date to 16th August. No dak was received from 10th to 12th, and from 13th to 16th the dak was conveyed on trollies. On the 17th August the trains were able to run again between Wazirabad and Muridki, the water had to a great extent subsided by this time and the entire line was re-opened on 21st August last.

5. In regard to damages to buildings, crops, cattle, and human lives, &c., I beg to annex another statement marked B. which will shew you every description of loss and damage in each pargunnah, but tahsil Gujranwala suffered the most in every respect, next comes Wazirábad, except in cattle which is more in Hafizabad.

6. With all these losses and damages no application has been received for remission, and the Government demand has been realized without any unusual trouble or severe coercive measures. I have not been able to go in camp, but much must have been repaired and replaced before I joined this district at the end of October last. I however do not find any applications for takavi advances on this account, neither do the registration returns show any remarkable increase of sales or mortgages, in fact registrations under Book Circular IV affecting movable property show a decrease of 180 against that of 1874-75.

7. In conclusion I beg to state that the estimate of damages to Government buildings was calculated at Rs. 2,977-12-0, and that to district roads and bridges at Rs. 7,602-12-0; but the greater part of the buildings, roads and bridges have been repaired and put to right, what little are remaining will be repaired this year as the Public Works Department was not able to supply funds to complete the repairs last year. Detailed statements of these damages were sent to you with my predecessor's No. 277 of 13th October 1875 and are therefore not again submitted.

No. A.

Rain-fall in the Gujranwala District for July and August 1875.

Rain Guage Stations.	July 1875.																															
	1	2	3 ●	4	5	6	7	8	9	10 ☽	11	12	13	14	15	16	17	18 ○	19	20	21	22	23	24	25 ☾	26	27	28	29	30	31	Total.
Sadr Kacheri	...	...	...	...	...	...	1·1	...	...	0·6	0·9	...	1·7	...	3·3	7·0	...	...	...	...	...	...	...	...	...	1·2	...	...	...	...	5·4	21·2
Gujranwala	...	...	...	...	...	...	1·0	...	...	0·7	1·0	...	1·3	...	2·3	5·0	...	...	...	...	...	...	...	...	...	2·2	...	...	...	...	4·8	18·3
Wazirabad	...	...	...	...	...	...	1·0	...	...	1·1	...	...	0·8	0·3	0·4	2·7	...	...	...	...	...	...	...	...	...	0·4	...	...	...	2·6	...	9·3
Hafizabad	...	...	...	...	...	...	...	...	...	...	0·8	...	2·7	...	0·2	0·2	...	...	...	...	...	...	...	...	...	...	...	...	...	4·2	...	8·1
Total ...	...	...	...	...	...	...	3·1	...	...	2·4	2·7	...	6·5	0·3	6·2	14·9	...	...	...	...	...	...	...	...	...	3·8	...	...	...	6·8	10·2	56·9

Rain Guage Stations.	August 1875.																															
	1 ●	2	3	4	5	6	7	8	9 ☽	10	11	12	13	14	15	16	17 ○	18	19	20	21	22	23	24 ☾	25	26	27	28	29	30 ●	31	Total.
Sadr Kacheri	...	...	...	...	...	...	1·5	1·0	2·1	7·1	1·9	1·3	...	...	...	0·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15·2
Gujranwala	...	...	...	...	...	...	1·4	1·1	1·8	7·2	1·8	0·9	...	...	...	0·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14·5
Wazirabad	...	...	...	...	...	0·2	1·0	0·4	3·0	5·7	1·2	1·8	...	...	...	0·1	0·6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14·0
Hafizabad	...	...	...	...	...	0·2	...	...	2·7	3·1	4·6	0·4	...	...	...	0·5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11·5
Total ...	...	...	...	...	...	0·4	3·9	2·5	9·6	23·1	9·5	4·4	...	...	...	1·2	0·6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55·2

B.

Statement showing the damage done to buildings, crops and cattle &c. in the Gujranwala District by the unusual rains and floods on the 13th, 15th, 30th and 31st July and from 9th to 11th August 1875.

No.	TAHSIL.	PERGANNAH.	No. of villages damaged.	Buildings in No.	Crops in Acres.	Cattle. Milch Cows and Buffaloes.	Cattle. Plough Bullocks and Buffaloes.	Cattle. Beasts of Burden.	Cattle. Total.	Wells.	Persons dead.	REMARKS.
1	Gujranwala	Gujranwala ...	114	3,781	4,755	145	247	20	412	92	5	
2		Kamoki ...	85	1,856	3,399	152	118	24	294	54	...	
3		Naushera ...	86	784	995	1	4	...	5	9	1	
4		Nokhar ...	94	2,426	3,344	93	37	...	130	44	3	
		Total ...	379	8,847	12,493	391	406	44	841	199	9	
5	Hafizabad ...	Hafizabad ...	89	914	...	...	...	...	...	...	...	
6		Vaniki ...	114	2,103	...	...	...	...	...	7	2	
7		Pindi Bhattian ...	100	989	1,310	500	61	...	561	...	...	
8		Sukheki ...	51	112	...	...	...	...	...	...	...	
9		Shekhupura ...	45	205	750	...	...	...	...	...	...	
		Total ...	399	4,323	2,060	500	61	...	561	7	2	
10	Wazirabad,	Wazirabad ...	173	3,287	2,318	54	49	7	110	45	1	
11		Ramnaggar ...	119	2,189	275	8	23	2	33	8	...	
		Total ...	292	5,476	2,593	62	72	9	143	53	1	
		Grand Total ...	1,070	18,646	17,146	953	539	53	1,545	259	12	

No. 368, dated 17th December 1875.

From—Captain L. J. H. Grey, Deputy Commissioner, Ferozepore,
To—Colonel R. Young, Commissioner and Superintendent Lahore, Division.

In reply to his circular No. 162—2346, dated 22nd October last, reports that in this district three heavy falls of rain took place, the first from 7th to 12th August, when the rain-fall varied from 6·65 in Muktsar to 12·5 in Ferozepore, the second from 8th to 12th September, when rain fell varying from 3·6 in Ferozepore to 11·9 in Mogah, the third from 23rd to 26th September, when about 5 inches of rain fell. The total rain-fall in these 2 months August and September, was

Ferozepore ...	... 22·1	Zirah ...	... 25·2
Mogah ...	... 26·3	Muktsur ...	... 20·75

or an average of 23·6.

In Zirah little or no damage was caused. In the rest of the district much damage was done to wells and buildings, and in some places to roads. Crops were not injured except in a few instances near the river side.

TABLE SHOWING THE DAILY RAIN-FALL

IN CERTAIN DISTRICTS OF THE PUNJAB BETWEEN THE

1ST JULY AND 30TH SEPTEMBER 1875.

Table showing the daily rain-fall in certain districts of the

Division.	District.	Tahsil.	JU												
			1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	11th.	12th.	13th.
Dehli.	*Dehli* ...	Dehlî ...	......	......	......	......	0·8	......	......	......	......	0·4	......	......	......
		Sonepat ...	......	......	......	......	0·2	0·6	0·2	......	......	0·3	......	......	......
		Ballabgarh	......	......	......	......	0·1	......	......	......	......	0·2	......	......	......
	Gurgaon ...	Gurgaon ...	......	0·4	......	......	0·4	......	......	......	......	1·3	......	......	......
		Firozpur ...	......	0·5	......	......	0·7	......	......	......	......	3·0	......	......	......
		Nuh ...	......	......	......	......	0·4	......	......	......	......	3·0	......	......	......
		Palwal ...	......	......	......	......	......	......	......	......	......	1·6	......	......	......
		Rewari ...	......	......	......	......	0·3	......	......	......	......	3·5	......	......	......
	Karnal ...	Karnal ...	......	......	0·2	......	0·1	0·5	......	......	......	0.7	......	0·6	......
		Paniput ...	......	......	......	......	......	0·6	......	......	......	......	......	......	......
		Kaithal ...	......	......	......	......	......	......	......	......	......	0·3	......	0·2	0·3
Hissar.	*Hissar* ...	Hissar ...	......	0·1	......	......	......	0·6	......	......	......	0·3	......	......	......
		Hansi ...	......	0·3	......	......	......	......	......	......	......	0·7	......	......	......
		Bhiwani ...	......	......	......	......	0·3	0·4	......	......	......	0.6	......	......	......
		Barwala ...	......	0·2	......	......	......	......	......	......	......	0 6	......	......	......
		Fatehabad,	......	......	......	......	......	......	......	......	......	0·5	......	......	......
	Rohtak ...	Rohtak ...	......	......	......	......	......	......	......	......	......	1·0	......	......	......
		Jhajjar ...	......	......	......	......	......	......	......	......	......	1·2	......	......	......
		Samp:a ...	......	......	......	......	......	......	......	......	......	1·0	......	......	......
		Gohana ...	......	......	......	......	......	......	......	......	......	0·6	......	......	......
	Sirsa ...	Sirsa ...	......	......	......	0·2	......	......	......	......	......	0·2	......	......	......
		Dabwali ...	......	......	......	......	......	......	......	......	......	......	......	......	......
		Fazilka ...	......	......	......	......	......	......	......	......	......	......	......	......	0·7
Jallandar.	*Jullundur*	Jullundur,	......	......	......	......	......	0·1	......	......	......	......	......	......	1·6
		Nawashahr,	......	......	......	......	0·2	......	......	......	......	0·5	......	......	......
		Phillour ...	......	......	......	......	......	......	......	......	......	1·1	0·8	......	......
		Nakodar ...	......	......	0·1	......	......	......	......	......	......	0·3	......	......	2·7
	Hoshiarpur	Hoshiarpur,	0·1	......	......	......	......	0·3	......	......	......	0·2	......	0·9	0·4
		Dasuha ...	......	......	......	0·1	......	0·7	......	......	......	......	0·4	......	5·1
		Una ...	......	0·1	0·4	0·1	......	0·3	......	......	......	......	......	......	......
		Garshankar	......	......	......	......	0·2	0·4	......	......	......	......	......	......	......
	Kangra ...	Kangra ...	......	......	0·6	0·7	......	......	......	......	0·2	0·3	0 9	1·9	0·2
		Nurpur ...	......	......	0·1	0·5	0·5	......	0·1	......	......	1·8	3·6	0·2	0·6
		Hamirpur,	0·1	0·2	......	0·6	......	0·6	......	0·5	0·2	......	......	......	1·4
		Dera ...	......	......	......	0·5	0·9	0·7	......	......	......	0·2	......	0·9	2·4
		Kullu ...	0·9	0·1	......	......	......	......	......	......	......	......	......	0·4	0·8
Amritsar.	*Amritsar*...	Amritsar ...	......	......	......	......	......	0·4	......	......	......	......	......	......	0·5
		Taran Tarn,	......	......	......	......	......	0·2	......	......	......	0·3	......	......	0·9
		Ajnala ...	......	......	......	......	......	......	......	......	......	......	......	1·4	0·4
	Gurdaspur	Gurdaspur,	......	......	......	......	......	0·4	......	......	......	......	......	0·1	......
		Batala ...	......	......	......	......	......	0·4	......	......	......	......	......	......	2·0
		Pathankot,	......	......	......	......	0·7	0·1	......	......	......	......	......	......	0·5
		Shakargarh,	......	......	......	......	......	......	......	0·5	......	......	......	......	......
	Sialkot ...	Sialkot ...	0·1	......	......	......	......	......	2·2	......	......	0·2	0·2	......	1·0
		Pasrur ...	......	......	......	......	......	......	0·2	0·3	......	......	......	0·1	0·5
		Raya ...	......	......	......	......	......	......	......	......	......	0·3	......	......	0·8
		Zafarwal ...	......	......	......	......	......	......	0·8	......	......	......	......	......	0·3
		Daska ...	......	0·2	......	......	......	......	1·1	......	......	......	0·5	......	0·3
Lahore.	*Lahore* ...	Lahore ...	......	......	......	......	......	......	......	......	......	......	0·1	......	0·3
		Chunian ...	......	......	......	......	......	......	0·5	......	......	......	......	......	0·8
		Kasur ...	......	......	......	......	......	0·6	......	......	......	......	......	......	2·7
		Sharakpur,	......	......	0·2	......	......	......	......	......	......	0·5	0·1	......	0·3
	Gujranwala	Gujranwala	......	......	......	......	......	......	1·1	......	......	0·6	0·9	......	1·3
		Wazirabad,	......	......	......	......	......	......	1·0	......	......	1·1	......	......	0·8
		Hafizabad,	......	......	......	......	......	......	......	......	......	......	0·8	......	2·7
	Ferozepore	Ferozepore	......	......	......	......	......	0·1	......	......	......	0·2	......	......	1·4
		Zira ...	......	......	......	......	......	......	......	......	......	......	......	......	3·9
		Moga ...	......	......	......	......	......	......	......	......	......	......	......	......	0·7
		Muktsar ...	......	......	......	......	1·1	......	......	......	......	......	......	......	0·2

Punjab between the 1st July and 30th September 1875.

LY.

14th.	15th.	16th.	17th.	18th.	19th.	20th.	21st.	22nd	23rd.	24th.	25th.	26th.	27th.	28th.	29th.	30th.	31st.	Total fall for July 1875.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0 3	0·8	.....	.....	0·1	0·4	0·6	.....	3·4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·4	.....	.....	.....	.....	1·6	.....	3·3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·6	.....	.....	.....	.....	.....	.....	0·9
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1·3	.....	.....	.....	3·1	1·2	.....	8·7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·3	.....	.....	0·1	0·1	4·7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·6	.....	4·0
.....	.....	.....	.....	.....	.....	.....	.....	1·0	.....	0·2	0·5	.....	.....	.....	.....	0·7	.....	4·0
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·1	.....	0·6	0·1	.....	0·8	.....	5·4
.....	0·7	.....	.....	.....	.....	.....	.....	.....	0·5	0·2	0·3	.....	0·1	.....	1·5	2·5	.....	7·9
.....	0·3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·2	0·3	1·6	.....	3·0
.....	0·2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3·2	.....	.....	1·0	2·0	.....	7·2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1·9	0·8	0·4	.....	0·4	.....	4·5
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·6	.....	0·7	.....	2·3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·5	0·9	0·1	3·2	.....	6·0
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·5	1·1	0·1	0·8	0·3	.....	3·4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1·2	0·2	.....	.....	.....	2·1
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·2	6·3	.....	.....	0·7	0·3	.....	2·5
.....	.....	.....	.....	.....	.....	.....	.....	.....	0·5	.....	.....	0·1	0·2	0·5	0·1	1·2	.....	3·8
.....	.....	.....	.....	.....	.....	.....	.....	.....	0·1	.....	.....	.....	.....	.....	.....	1·0	.....	2·1
.....	0·3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·2	0·1	.....	1·0	.....	1·5
.....	0·8	0·2	.....	.....	.....	.....	.....	.....	.....	.....	0·1	0·9	.....	0·7	.....	1·8	.....	4·9
1·2	0·2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2·6	.....	0·6	.....	4·6
0·9	.....	1·8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3·4
0·6	1·3	.....	1·0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1·5	1·0	7·1
1·4	0·2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3·8	0·3	6·4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4·0	.....	5·9
0·2	0·3	1·4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·1	1·9	0·1	.....	7·1
2·6	1·4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·2	0·5	1·9	.....	0·4	8·0
0·2	3·8	0·7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·1	0·8	2·7	.....	14·6
0·7	1·7	0·5	.....	.....	.....	0·6	.....	.....	.....	.....	.....	0·2	.....	0·2	1·7	1·7	.....	8·2
1·0	0·8	0·6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·2	4·6	0·1	7·9
0·8	3·4	0·2	.....	.....	2·1	2·1	3·8	.....	2·8	1·2	3·7	1·2	1·3	1·7	2·5	2·4	.....	34·0
4·6	3·4	0·8	0·2	0·5	1·4	1·9	2·2	.....	.....	.....	0·6	0·7	0·7	0·3	1·4	0·5	.....	26·6
.....	0·9	1·6	.....	.....	0·6	4·3	1·1	0·2	.....	.....	.....	.....	0·5	0·2	3·9	.....	.....	16·9
1·3	3·0	.....	.....	.....	.....	1·4	1·2	.....	.....	.....	.....	0·9	.....	2·3	3·6	2·7	0·1	22·1
1·0	0·2	.....	.....	.....	.....	.....	.....	1·8	.....	0·2	0·5	0·5	0·1	.....	0·1	0·4	0·1	7·1
0·5	1·6	2·7	.....	.....	.....	.....	.....	.....	.....	.....	0·2	0·2	.....	.....	.....	2·1	.....	8·2
0·9	1·5	2·8	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·9	.....	.....	.....	1·4	.....	8·9
1·2	0·1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5·0	0·1	8·2
.....	5·3	0·2	.....	.....	.....	.....	.....	.....	.....	.....	0·2	1·7	.....	.....	2·2	5·2	.....	15·3
0·5	2·6	1·1	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·3	0·4	.....	.....	4·8	.....	12·2
0·2	3·8	0·3	.....	.....	0·6	.....	0·1	.....	.....	.....	0 2	0·9	.....	0·1	0·6	2·2	.....	10·3
0·5	5·8	0·4	.....	.....	.....	.....	.....	.....	.....	.....	0·8	0·6	.....	3·2	.....	.....	.....	11·8
0·4	1·0	5·0	.....	.....	.....	.....	.....	.....	.....	.....	0·5	1·3	.....	.....	1·5	4·3	.....	17·7
0·9	0·9	0 6	.....	.....	.....	.....	.....	.....	.....	.....	0·6	0·1	.....	.....	.....	4·4	.....	8·6
.....	0·5	0·6	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·5	.....	.....	.....	6·1	.....	8·8
0·3	0·4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1·9	.....	.....	0·3	3·6	.....	7·6
.....	0·6	3·7	.....	.....	.....	.....	.....	.....	.....	.....	0·3	0·6	.....	.....	.....	4·3	.....	8·6
.....	2·1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·7	.....	3·2
1·9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·5	.....	3·7
0·2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·1	3·6
2·1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·5	.....	3·7
.....	2·3	5·0	.....	.....	.....	.....	.....	.....	.....	.....	.....	2·2	.....	.....	.....	.....	4·8	18·2
0·3	0·4	2·7	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·4	.....	.....	.....	2·6	.....	9·3
.....	0·2	0 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4·2	.....	8·1
0·3	1·3	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·4	.....	.....	.....	0·3	1·3	.....	5·3
2·9	5·0	0·9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2·1	.....	14·8
.....	2·5	5·2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2·3	.....	2·5	1·0	.....	14·2
.....	1·1	1·2	0·2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·1	1·1	1·1	6·1

Table showing the daily rain-fall in certain districts of the

Division.	District.	Tahsils.	AUG 1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	11th.	12th.	13th.
Dehli.	*Dehli* ...	Dehli ...	......	......	......	......	......	......	1·7	......	......	......	0·7	0·5	0·3
		Sonepat ...	......	......	0·7	......	......	......	......	......	0·2	......	......	1·2	0·3
		Ballabgarh	......	......	......	......	......	0·1	2·5	......	0·1	......	0·3	0·2	0·3
	Gurgaon ...	Gurgaon ...	......	0·2	......	0·1	0·2	......	1·7	......	......	......	0·4	0·7	0·8
		Firozpur ...	......	......	......	......	......	......	3·3	......	0·6	......	1·0	......	2·0
		Nuh ...	......	......	......	......	......	1·0	1·6	......	......	......	1·7	0·5	0·8
		Palwal ...	......	......	......	......	......	......	3·7	......	......	......	1·9	1·4	......
		Rewari ...	......	......	......	......	......	......	1·4	......	0·1	......	0·2	......	0·1
	Karnal ...	Karnal ...	......	0·1	......	......	0·2	3·8	1·8	0·2	......	......	......	0·4	0·6
		Panipat ...	......	......	......	......	......	1·6	0·5	1·5	......	......	......	0·1	0·2
		Kaithal ...	0·8	......	......	......	......	0·8	1·1	0·1	......	......	......	0·3	0·2
Hissar.	*Hissar* ...	Hissar ...	......	......	......	......	......	......	2·2	2·2	......	......	......	1·5	......
		Hansi ...	......	......	......	......	......	......	1·3	1·0	......	......	......	......	......
		Bhiwani ...	......	......	......	......	......	......	2·2	0·6	1·4	0·2	0·1	......	0·1
		Barwala ...	......	......	......	......	......	......	1·2	0·1	0·3	......	......	......	......
		Fatehabad,	......	......	......	......	......	......	1·6	1·0	......	......	......	......	......
	Rohtak ...	Rohtak ...	......	......	......	......	......	0·3	1·2	0·3	......	......	1·6	0·3	......
		Jhajjar ...	......	......	......	......	......	......	0·7	......	0·7	......	0·1	0·1	0·7
		Sampla ...	......	......	......	......	......	......	1·5	......	0·2	......	1·4	1·6	......
		Gohana ...	......	0·2	0·2	......	......	......	0·6	......	0·7	......	......	......	0·2
	Sirsa ...	Sirsa ...	......	......	......	......	......	......	0·5	0·9	0·1	0·1	......	1·4	......
		Dabwali ...	......	......	......	......	......	......	......	1·3	......	......	......	......	......
		Fazilka ...	......	......	......	......	......	......	......	1·8	......	......	......	......	......
Jullundur.	*Jullundur*	Jullundur,	......	0·9	0·2	......	......	......	3·0	0·8	......	......	0·4	4·0	7·1
		Nawashahr,	......	......	......	0·2	1·0	2·1	3·0	......	......	......	......	2·4	3·2
		Phillour ...	......	......	......	......	......	0·8	3·4	0·6	0·1	......	......	1·4	2·3
		Nakodar ...	......	0·6	......	......	......	1·7	2·4	0·8	......	......	0·6	1·7	2·8
	Hoshiarpur	Hoshiarpur,	0·4	0·8	0·3	0·2	1·3	1·0	1·7	0·3	1·3	......	1·6	3·2	1·2
		Dasuha ...	1·7	0·1	0·8	0·9	1·2	2·2	0·8	0·5	1·0	0·6	1·4	4·0	2·8
		Una ...	0·8	0·8	0·6	0·9	1·5	3·0	1·0	0·5	0·2	0·1	0·1	2·0	1·1
		Garshankar	0·5	0·3	0·1	......	0·8	2·9	2·9	......	......	......	0·8	1·3	4·1
	Kangra ...	Kangra ...	0·8	3·6	2·5	2·3	2·0	3·0	3·0	1·6	......	1·4	0·6	2·9	1·9
		Nurpur ...	4·9	2·5	0·3	1·8	1·7	1·5	0·8	0·8	1·3	1·6	1·3	4·1	0·4
		Hamirpur,	......	4·6	3·9	3·4	3·0	3·7	1·8	......	0·2	0·3	0·6	0·8	1·5
		Dera ...	2·0	3·5	1·0	5·0	3·7	4·3	1·0	1·1	0·5	0·1	......	2·4	2·2
		Kullu ...	......	1·2	......	......	0·7	0·7	0·7	0·8	0·5	0·4	0·5	0·6	1·3
Amritsar.	*Amritsar*...	Amritsar ...	0·1	......	......	......	......	0·3	......	1·4	2·8	5·4	1·2	4·1	1·1
		Taran Tarn,	......	......	......	......	......	0·3	......	1·0	1·8	9·3	0·6	7·8	1·7
		Ajnala ...	......	......	......	......	......	......	......	1·5	4·9	4·4	0·4	1·2	1·3
	Gurdaspur	Gurdaspur,	0·7	0·3	0·3	.. ...	0·2	1·3	0·3	0·6	2·6	5·3	0·2	9·0	0·2
		Batala ...	......	0·8	0·3	......	......	......	0·5	......	4·4	6·0	4·0	4·3	2 6
		Pathankot,	......	4·0	......	0·9	1·4	3·9	0·3	......	2·5	3·6	0·1	3·8	0·9
		Shakargarh,	......	1·6	0·7	......	......	......	......	1·6	2·5	5·2	1·2	3·3	0·6
	Sialkot ...	Sialkot ...	......	0·3	......	......	......	......	......	0·6	3·5	8·9	5·1	2·6	1·2
		Pasrur ...	0·3	......	0·4	......	......	......	......	0·5	5·2	9·2	3·3	1·0	1·5
		Raya ...	......	......	......	......	......	......	......	0·5	4·6	6·2	3·4	3·5	5·1
		Zaffarwal ...	......	......	0·4	......	0·2	......	......	0·9	4·7	4·6	1·7	3·2	4·3
		Daska ...	......	......	......	......	......	......	0·3	0·2	3·0	6·8	3·4	......	0·1
Lahore.	*Lahore* ...	Lahore ...	......	......	......	......	......	......	0·7	1·6	2·5	6·2	......	3·0	......
		Chunian ...	......	......	......	......	......	......	......	2·5	6·6	9·4	......	0·8	......
		Kasur ...	......	......	......	......	......	......	......	2·1	5·1	24·0	......	1·1	......
		Shakarpur,	......	......	......	......	......	......	......	1·4	4·2	4·2	2·6	2·4	......
	Gujranwalla	Gujranwalla	......	......	......	......	......	......	1·4	1·1	2·1	7·1	1·9	1·3	......
		Wazirabad,	......	......	......	......	......	0·2	1·0	0·4	3·1	5·7	1·2	1·8	......
		Hafizabad,	......	......	......	......	......	0·2	......	......	2·7	3·1	4·6	0·4	......
	Ferozepore	Ferozepore	......	......	......	......	0·5	......	0·9	1·0	3·3	3·3	0·9	2·2	0·2
		Zira ...	......	......	......	......	......	......	0·3	0·6	0·5	4·8	......	5·0	0·1
		Moga ...	......	......	......	......	......	......	......	0·2	0·2	2·2	1·6	3·6	0·4
		Muktsar ...	......	......	......	......	......	......	1·6	1·1	0.8	3·1	......	......	......

Punjab between the 1*st July and* 30*th September* 1875.*—continued.*

U S T.

14th.	15th.	16th.	17th.	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	25th.	26th.	27th.	28th.	29th.	30th.	31st.	Total fall for Aug. 1875.
1·7	......	......	0·1	......	......	......	......	......	......	......	......	......	......	......	......	0·1	......	5·1
1·0	......	......	......	......	......	......	0·3	......	......	......	......	......	......	......	......	0·3	......	4·7
......	......	0·7	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	4·2
1·1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	5·2
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	6·9
3·1	......	0·1	......	......	......	......	......	......	......	......	......	......	......	......	......	0·3	......	8·1
3·2	......	......	......	......	......	......	0·2	......	......	......	......	......	......	......	......	......	......	11·4
......	2·2	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	4·0
1·5	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	8·6
6·9	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	3·8
0·2	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	3·5
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	5·9
0·2	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2·5
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	4·6
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	1·6
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2·6
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	3·7
0·1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2·4
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	0·1	4·8
0·5	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2·4
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	3·0
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	1·3
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	1·8
1·4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	17·8
1·0	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	12·9
0·7	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	9·3
4·3	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	14·9
0·3	......	0·1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	13·7
1·2	0·1	0·2	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	18·5
3·5	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	16·1
1·9	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	15·4
0·5	0·7	......	......	......	......	......	......	......	0·7	0·7	0·7	0·7	......	......	......	......	......	29·9
1·3	1·0	......	1·6	......	......	......	......	......	......	......	......	......	......	......	......	......	......	26·9
0·2	2·5	......	......	......	......	......	......	......	......	0·2	0·1	......	......	......	......	......	......	26·8
1·7	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	28·5
0·6	......	0·4	0·2	......	......	......	......	......	......	......	......	0·5	......	......	......	......	......	8·6
0·3	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	16·7
1 6	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	24·1
0·4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	14·1
0·6	......	2·0	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	23·6
0·2	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	23·1
0·7	......	0·5	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	22·6
0·3	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	17·0
1·0	......	0·4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	23·6
1·0	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	22·6
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	23·3
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	20·2
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	14·1
......	......	0·5	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	14·5
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	19·3
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	32·3
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	14·8
......	......	0·3	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	15·2
......	......	0·7	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	14·1
......	......	0·5	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	11·5
0·2	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	12·5
0·4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	11·7
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	8·2
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	6·6

Table showing the daily rain-fall in certain districts of the

Division.	Districts.	Tahsils.	SEPT												
			1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	11th.	12th.	13th.
Dehli.	*Dehli* ...	Dehli ...	......	......	......	......	0·1	......	0·6	2·9	19·5	0·2	0·2	0·8	......
		Sonepat ...	......	......	......	......	......	......	0·5	4·2	13·5	0·6	1·1	0·7	......
		Ballabgarh,	......	......	......	......	0·4	2·5	2·5	3·9	11·8	0·4	1·0	......	......
	Gurgaon ...	Gurgaon ...	......	......	......	......	......	......	1·5	9·2	10·6	2·3	0·8	......	......
		Firozpur ...	......	......	......	......	......	......	......	4·5	4·7	1·2	0·3	......	......
		Nuh ...	......	......	......	......	2·0	0·1	1·0	8·8	7·7	1·7	0·6	1·1	......
		Palwal ...	......	......	......	......	......	......	1·9	6·3	15·7	0·5	0·4	0·3	......
		Rewari ...	......	......	......	......	......	......	......	3·9	3·8	1·0	1·4	......	......
	Karnal ...	Karnal ...	......	......	......	......	0·1	......	......	1·3	5·9	0·5	1·5	......	......
		Panipat ...	......	......	......	......	0·4	......	......	2·4	6·5	0·2	1·5	0·5	......
		Kaithal ...	......	......	......	......	1·1	......	......	0·5	1·9	2·3	1·1	0·9	......
Hissar.	*Hissar* ...	Hissar ...	......	......	......	......	......	......	......	1·8	2·3	0·7	1·2	......	......
		Hansi ...	......	......	......	......	0·6	......	......	3·0	4·3	1·4	1·1	0·2	......
		Bhiwani ...	......	......	......	......	......	0·1	0·1	3·4	3·6	3·7	3·1	......	......
		Barwala ...	......	......	......	......	1·0	......	0·1	2·3	2·9	0·5	0·3	......	......
		Fatehabad,	......	......	......	......	......	......	......	0·9	1·1	0·1	0·9	......	......
	Rohtak ...	Rohtak ...	......	......	......	......	......	......	......	7·0	7·4	3·8	0·7	......	......
		Jhajjar ...	......	......	......	......	......	......	......	7·5	7·4	2·4	0·4	......	0·7
		Sampla ...	......	......	......	......	......	......	0·3	7·3	10·2	4·6	0·2	......	......
		Gohana ...	......	......	......	......	......	......	......	4·4	10·2	1·3	3·4	......	......
	Sirsa ...	Sirsa ...	......	......	......	......	0·4	0·3	......	0·3	1·0	3·0	0·3	0·1	......
		Dabwali ...	......	......	......	......	......	......	......	......	1·0	3·6	0·1	0·1	......
		Fazilka ...	......	......	......	......	......	0·6	......	......	0·2	0·9	......	0·1	......
Jullundur.	*Jullundur*	Jullundur,	......	......	......	......	......	0·4	......	......	......	6·0	9·1	......	......
		Nawashahr,	......	......	......	......	......	0·3	......	......	1·6	5·3	7·8	0·4	......
		Phillour ...	......	......	......	......	......	......	......	......	0·5	6.0	2·0	0·1	......
		Nakodar ...	......	......	......	......	......	0·7	......	......	2·3	7·3	3·0	......	......
	Hoshiarpur	Hoshiarpur,	......	......	......	......	0·2	......	......	......	1·0	6·3	1·5	......	......
		Dasuha ...	......	......	......	......	......	......	......	......	......	7·2	2·5	0·2	......
		Una ...	......	......	......	......	......	......	......	......	0·6	3·4	4·9	......	......
		Garshankar	......	......	......	......	......	0·3	......	0·1	1·2	4·2	5·5	0·2	......
	Kangra ...	Kangra ...	......	......	......	......	......	1·1	......	......	0·4	2·6	1·7	......	......
		Nurpur ...	......	......	......	......	0·8	......	......	0·3	0·4	9·0	1·1	......	......
		Hamirpur,	......	......	......	......	......	1·0	1·2	1·1	1·1	1·2	2·7	......	......
		Dera ...	......	......	......	......	......	......	......	......	0·2	2·8	3·4	0·2	......
		Kullu ...	......	......	......	......	......	......	......	......	0·8	2·2	3·6	......	......
Amritsar.	*Amritsar* ...	Amritsar ...	......	......	......	......	......	......	......	......	......	1·9	1·8	......	......
		Tarn Taran,	......	......	......	......	......	......	......	......	......	1·3	2·7	......	......
		Ajnala ...	......	......	......	......	......	......	......	......	......	3·2	0·5	......	......
	Gurdaspur	Gurdaspur,	......	......	......	......	......	......	......	......	......	1·7	2·7	......	......
		Batala ...	......	......	......	......	......	......	......	1·4	......	1·9	2·8	......	......
		Pathankot,	......	......	......	......	......	2·7	......	......	......	3·6	4·4	......	......
		Shakargarh,	......	......	......	......	......	......	......	......	......	5·0	2·1	......	......
	Sialkot ...	Sialkot ...	......	......	......	......	......	......	......	......	......	......	1·0	......	......
		Pasrur ...	......	......	......	......	......	......	......	......	......	0·4	0·5	......	......
		Raya ...	......	......	......	......	......	......	......	......	......	2·0	0·1	......	......
		Zafarwal ...	......	......	......	......	......	......	......	......	......	1·8	0·9	......	......
		Daska ...	......	......	......	......	......	0·3	......	......	......	......	0·4	......	......
Lahore.	*Lahore* ...	Lahore ...	......	......	......	......	......	......	......	......	......	1·7	0·1	......	......
		Chunian ...	......	......	......	......	......	......	0·5	......	......	......	......	......	......
		Kasur ...	......	......	......	......	......	......	......	......	......	1·0	0·3	......	......
		Sharakpur,	......	......	......	......	......	......	......	......	......	1·1	0·3	......	......
	Gujranwala	Gujranwala	......	......	......	......	......	0·1	......	......	......	......	......	......	......
		Wazirabad,	......	......	......	......	......	......	......	......	......	......	0·7	0·1	......
		Hafizabad,	......	......	......	......	......	......	......	......	......	......	1·2	......	......
	Ferozepore	Ferozepore	......	......	......	......	......	......	......	......	1·6	1·1	0·9	......	......
		Zira ...	......	......	......	......	......	......	0·2	......	......	......	......	......	......
		Moga ...	......	......	......	......	......	......	......	......	......	4·0	4·1	0·2	......
		Muktsar ...	......	......	......	......	......	......	......	......	......	4·8	5·2	1·9	......
			......	......	......	......	......	......	......	1·9	......	6·3	......	......	......

Punjab between the 1st *July and* 30*th September* 1875.—Concluded.

EMBER.

14th.	15th.	16th.	17th.	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	25th.	26th.	27th.	28th.	29th.	30th.	Total fall for Septr. 1875.	Total fall from 1st July to 30th September 1875.
						0·2	0·8				1·0	1·1					27·4	35·9
0·3											2·5	0·3	0·3				24·5	32·5
						0·9						0·2	0·3				23·9	29·0
			0·4		0·2	1·1		0·2			0·7	1·0	0·1	0·2			28·2	42·1
	0·3					1·9	0·2	0·3	0·8	0·6	0·3		0·8	1.5			17·4	29·0
0·1		0·8			0·1	0·5			0·1	0 1	0·4	0·1				1·3	26·5	38·6
	0·2			0·2	0·4												26·9	42·3
						0 4				0·3	0·4	0·1	0·7				12·0	21·4
						0·4					2·9	1·3	0·2				14·1	30·6
						0·3					1·2	2·3					15·3	22·1
			2·8			0·1				0·2	1·1		0·5	0 5	0·1		13·6	24·3
						0·2				0·3	2·0	3·2			1 0		11·8	22·2
			0·1			0·4					2·1	2·4			0·2		15·8	20·6
						0 9			0·2	0·5	1·0		3·6				20·2	30·8
						0·1					2·3	0·4	0·3		0 5		10·7	15·7
											3 0	0·3					6·3	11·0
						0 1					1·7	1·1	0·2				22·0	28·2
						0·3			0·1		1·5		3·0				23·3	29·5
								1·6			1·8		1·5				27·5	34·4
0·4											2·0						21·7	25·6
						0·1				0·5	2·4	0·7			0·4		9·5	17·4
						0·9					1·7				0·8		8·2	14·1
										1·6	3·6						7·0	12·2
								0·1	0·5	0·5	7·0	0·5					24·1	49·0
											2·9	1·4					19·7	39·0
										0 3	4·1	1·1					14·1	29·0
		0·3					0·4	0·2	0 2	0·5	6·3						21·2	43·2
								0·8	0·6	0·2	4 0	0·1				0·3	15·0	36·7
							0·2	0·4	0·1	0·2	4·4	2·4			0·4		18·0	51·1
	1·3	0·1								0·8	1·6	4·3					17·0	41·3
								0·6			3·1	1·8					17·0	40·3
0·9		3·6					1·8		0·4	3·0	0·6	3·0				1·3	20·4	84·3
	0·5	1·0	0·5				0·5	3·0	1·2	2·0	0 7	5·0					26·0	79·5
	0·6	0 7	0·2				0·5	0·5	0·8	0·7	0·5		0·9	0·5			14·2	57·9
		2·0					0·4	0·4		0·6		4·2	1·5				15·7	66·3
		0·1								0·4	1·2	0·5	2·6				11·4	27·1
								0·5	0·5	0·1	2·0	5·4					12·2	37·1
		1·5						0 2	1·6		5·1	3·2					15·6	48·6
		0·1						0·5	2·5	0·2	2·1	1·2					10·3	32·6
								1·3	0·2		1·0	3·6					10·5	49·4
		0·8						0·4	1·4	0·3	2·6	5·3					15·9	51·2
		0·1						2·0	1·0	0·2	0·4	4·1	1·0			1·0	20·5	53·4
		0·9							0·8	0·4	0 7	4·9	0·4	0·4			15·5	44·3
		2·2						0·2		0·5	0 5	1·8					6·2	47·5
		0·3						2·1	1·0	1·6		2·3					8·2	39·4
		0·5						0 7	0·6		2·2	1·6					8·4	40·5
	0 7							3·6			0·5	3·4					10·9	38·7
		0·5						0·3	0·2		0·6	0·8					3·1	25·8
																	1·8	19·5
						3·0	1·0				1·9		2·5		2·0		10·9	33·9
											4·7	1·4	0·7				8·1	44·0
							1·0				3·7						6·1	24·6
						0·2		0·3	0·5		0 6	0·5				0·1	3·1	36·5
		0·4				0 9			0·1		0·4	0·4					3·4	26·8
									0·3	0·8	0·6					0·1	1·8	21·4
									1·2	0·1	4·7						9·6	27·4
						0·2				0·2	4 0				0·6		13·5	40·0
						0·2			0·2		4·7	0·7					17·7	40·1
						0·9				0·3	5·0						14·4	27·1